UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

December 20, 2018

Ms. Karen Mogus, Deputy Director
California State Water Resources Control Board
Division of Water Quality
1001 I Street
Sacramento, CA 95614

RE: Comment Letter—Draft Toxicity Provisions in *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (October 19, 2018)

Dear ~~Ms. Mogus~~ Karen:

Thank you for the opportunity to comment on the proposed Toxicity Provisions, which are Sections III.B and IV. B in the Water Quality Control Plan for Inland, Surface Waters, Enclosed Bays, and Estuaries of California (Plan). Section III.B. describes the proposed water quality objectives for aquatic toxicity the State Water Resources Control Board (Board) plans to consider for adoption. EPA has no comments on Section III.B. EPA has comments and recommendations on Section IV.B, which describes implementation of the objectives in NPDES permits.

EPA commends California's efforts to develop provisions for toxicity control through this public process and supports the State Water Board's plan to consider for adoption the proposed water quality standards (objectives and beneficial uses) for toxicity, related policies for mixing zones/dilution credits and variances, and associated implementation provisions.

A unified approach to toxicity is important and overdue.

Monitoring data shows that toxicity is a widespread cause of surface water quality impairment in California. The current approach for addressing toxicity relies on a patchwork of narrative and numeric toxicity objectives and differing policies and choices for implementation, including data analysis. The current approach has led to inconsistent and sometimes incorrect evaluations of toxicity data, unclear expectations of point and non-point dischargers, and inadequate toxicity control in some NPDES permits. Since 2003, State Water Board orders addressing toxicity in NPDES permits have promised a more unified statewide approach to decision-making for toxicity. The proposed Toxicity Provisions provide such an approach to improve decision-making for toxicity across the State's water quality control programs by providing a consistent framework for addressing and—when required—limiting toxicity.

Numeric water quality based effluent limits promote clarity and accountability.

Numeric and narrative toxicity objectives are designed to protect surface waters regardless of the types of discharges to those waters. Several paragraphs under section III.B.4 appear to imply that a permitting authority has discretion to omit a water quality based effluent limit (WQBEL), even when one is required to meet applicable water quality standards. This is inconsistent with 40 C.F.R. § 122.44(d)(1)(i) (requiring that permits include any more stringent limits necessary to meet applicable water quality standards, including narrative criteria); 40 C.F.R. § 122.44(d)(1)(iv) (requiring effluent limits for WET where the discharge has reasonable potential to cause or contribute to an excursion of a numeric WET criterion); and 40 C.F.R. § 122.44(d)(1)(v) (requiring effluent limits for WET where the discharge has reasonable potential to cause or contribute to an excursion of a narrative WET criterion, unless the permitting authority demonstrates that chemical-specific limits are sufficient to attain the criterion). A "target" or "threshold" that does not include enforceable limits on toxicity would not appear to constitute an "effluent limitation," within the meaning of the statute. CWA Section 502(11) (defining effluent limitation as "any *restriction… on quantities, rates, and concentrations* of chemical, physical, biological and other constituents which are discharged from point sources…") (emphasis added).

These paragraphs in section III.B.4 also seem to suggest that a permitting authority has the discretion to include a non-numeric WQBEL, without the justification required under the NPDES regulations. 40 C.F.R. § 122.44(k)(3) allows for the use of non-numeric WQBELs in lieu of numeric limits when numeric effluent limits are infeasible. Accordingly, the permitting authority should not retain discretion to include non-numeric effluent limits for WET where there is reasonable potential to cause or contribute to an excursion of a toxicity criterion, absent a showing that it is infeasible to calculate a numeric limit. Moreover, the permitting authority would need to demonstrate that any such non-numeric limit was as stringent as necessary to meet the applicable toxicity criterion, as required by CWA Section 301(b)(1)(C) and its implementing regulations.

Similarly, section III.B.4 appears to contain a blanket prohibition against any numeric toxicity WQBELs in storm water permits, without considering the feasibility of including those limits on a case by case basis. Consequently, EPA believes this section should be clarified. While the State Water Board may not wish to specify procedures concerning implementation of all toxicity objectives for all types of discharges, it is unnecessary at this time to restrict how certain toxicity objectives are used in NPDES permits to set WQBELs.

The following language in **bold** is respectfully offered for your consideration to address concerns regarding paragraphs 3 through 5 in section III.B.4.

> The PERMITTING AUTHORITY shall have discretion regarding the application of narrative toxicity water quality objectives to derive **numeric** chemical specific effluent limitations **applied to the discharge**, receiving water limitations, targets, and other thresholds. **WQBELs required by 40 CFR 122.44(d)(1)(v) are not discretionary.**

endpoint identified in Table 1 of Section IV.B.1.b., the PERMITTING AUTHORITY shall have discretion regarding the application of narrative toxicity water quality objectives to derive **numeric** effluent limitations **applied to the discharge, receiving water limitations, targets, and other thresholds** for aquatic toxicity endpoints not addressed by any of the acute and chronic aquatic toxicity test method **endpoints** identified in Table 1 of Section IV.B.1.b (e.g., endocrine disruption). **WQBELs required by 40 CFR 122.44(d)(1)(v) are not discretionary.**

The PERMITTING AUTHORITY shall have discretion regarding the application of narrative or numeric toxicity water quality objectives to derive narrative **or numeric** effluent **limitations applied to the discharge** or receiving water limitations. **WQBELs required by 40 CFR 122.44(d)(1)(iv) and (v) are not discretionary.**

Turning to paragraph 6 in Section III.B.4, which reads:

> The PERMITTING AUTHORITY shall not include numeric effluent limitations for aquatic toxicity endpoints addressed by any of the acute and chronic toxicity test methods identified in Table 1 of Section IV.B.1.b to implement either the toxicity narrative or numeric water quality objectives except as indicated in section IV.B.2.e.

EPA reads this as a prohibition on numeric toxicity effluent limits for storm water permits (as section IV.B.2.e covers non-storm water permits). While numeric WQBELs may not be feasible on a case-by-case basis, there is no need to assume this is the case in all situations. EPA recommends deleting this paragraph or revising it to provide for a case-by-case determination of a storm water permit's water quality-based controls for toxicity.[1]

These revisions should ensure that NPDES permits in California will be issued in compliance with federal regulatory requirements for WQBELs.

Monthly median toxicity testing is achievable.

EPA would like to address a comment made at the public hearing on November 28, 2018, regarding the potential for delay in toxicity test initiation when organisms are provided by suppliers and not cultured by toxicity laboratories. Due to this concern, the commenter questioned the suitability of the proposed requirement to initiate three toxicity tests during a 30-day period and the practicability of determining compliance with the monthly median limit. EPA notes the following for your considerations:

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[1] For example, the Los Angeles municipal separate storm sewer system (MS4) permit includes a WQBEL for chronic toxicity of 1 chronic toxic unit for one sub-watershed, based on an applicable Total Maximum Daily Load (TMDL) waste load allocation protecting the Basin Plan's narrative toxicity objective (see 2012 Los Angeles MS4 permit, attachment N, page N-6): (https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/la_ms4/Revised/2nd%20REVISED%20TENTATIVE%20-%20Attachment%20N_11-5-12.pdf).

Most affected permittees conduct toxicity tests using either organisms cultured by toxicity laboratories or use test methods that have very short durations. Thus, many permittees do not need to order organisms to conduct Monthly Median Compliance Tests. Also test methods with short durations provide more days during the 30-day period for permittees to work with laboratories and suppliers to initiate at least 3 toxicity tests. However, for test organisms not cultured by a laboratory or the test method with a 7-day duration, permittees should be prepared to initiate testing to demonstrate compliance with the monthly median limit. This is achievable, as the Arizona Department of Environmental Quality and EPA Region 9 have been using a monthly median toxicity limit for more than 10 years.

EPA commends the State Water Board for the hard work that went into creating a more unified and coordinated statewide approach to assess toxicity discharges to non-ocean surface waters. If you have questions regarding these comments, please call me. You can also contact David Smith, Water Quality Assessment Section Chief at (415) 972-3464 or Elizabeth Sablad, NPDES Permits Section Chief at (415) 972-3044.

Sincerely,

Ellen Blake, Assistant Director
Ecosystems Branch